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TITLE: Electronic cash register capable of deciding validity or invalidity of register operator

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Brief Summary Text - BSTX (3):

A conventional ECR of this kind stores information with regard to individual cashiers, and a method for registering cashiers in such an ECR is already known. According to this known method, personal cashier numbers and/or personal identification numbers of the individual cashiers are stored beforehand in a memory of the ECR, and, when one of the cashiers starts to operate the ECR, this specific cashier is registered in the ECR.

Brief Summary Text - BSTX (5):

As shown in FIG. 1, the personal cashier number and/or the personal identification number of the cashier are supplied as input data in a step 71. In a step 72, the input data is collated with the stored information regarding the individual cashiers, and, in a step 73, whether the input data is correct or not is decided. If the input is not correct, the input data is discarded in a step 76, and the error is displayed in a step 77 to complete the operation. On the other hand, if the input data is correct, processing for registering the amount of sales is continued in a step 74 until the operation of the ECR ends in a step 75.

Brief Summary Text - BSTX (6):

However, in the prior art ECR, the validity or invalidity of the registration of a cashier was only determined on the basis of "whether or not the personal cashier number of the cashier is registered already?" or "whether or not the personal cashier number and the personal identification number coincide with those registered already?". Once the information regarding the individual cashiers was stored in the ECR, to be used for the decision of validity or invalidity, it was not easy to alter this information. Therefore, any one could freely operate the ECR, provided that the personal cashier

number
or both the personal cashier number and the personal identification number coincided with the number or numbers that were registered. This means that, although a personal identification number was employed, a cashier having a personal cashier number coinciding with that registered could easily operate the ECR. Furthermore a cashier who knew the personal identification number of another cashier having another personal cashier number could easily operate the
ECR using the personal cashier number of the other cashier. Thus, there was a management problem with regard to the money received in the drawer of the ECR.

Brief Summary Text - BSTX (9):

With a view to solving such a prior art problem, it is an object of the present invention to provide an ECR which can successfully determine the "validity" or "invalidity" of the registration of a cashier as a register operator, so that, even if the personal cashier number and the personal identification number of the cashier are correct, the cashier cannot basically operate the ECR in his or her off-duty time.

Detailed Description Text - DETX (3):

FIG. 3 is a block diagram schematically showing part of the ECR embodying the present invention. Referring to FIG. 3, a cashier number, personal identification number input means 21 supplies a cashier number and/or a personal identification number of a register operator as input data to the ECR. An input data errata deciding means 22 decides whether the input data supplied to the input means 21 is correct or not by reference to a registered data reading means 29 connected to a memory means 33. A register operator registration validity/invalidity deciding means 23 decides whether the register operator registration is valid or invalid by reference to a flag reading means 30 which reads a flag indicating the validity or invalidity of the register operator registration and which is also connected to the memory means 33. When
the validity of the register operator registration is decided by the deciding means 23, a register operator registering means 24 registers the valid register operator in the ECR. A flag setting means 25 sets a flag storing the validity or invalidity of the registration of a register operator. The flag setting means 25 sets the flag by reference to a flag writing means 31 which is connected to the memory means 33 to write the information on the flag. The flag information thus set is transmitted to other ECRs from a transmitter means 26 connected to the flag setting means 25. Another flag setting means 28 sets

a flag storing the validity or invalidity of the registration of a register operator. When the flag information transmitted from another ECR is received by a receiver means 27, the flag setting means 28 sets the flag by reference to a flag writing means 32 which is connected to the memory means 33 to write the information concerning the flag.

Detailed Description Text - DETX (4):

FIG. 4 is a flow chart showing in detail the operation of the ECR embodying the present invention. The operation of the embodiment will now be described by reference to FIG. 4. First, the cashier number or both the cashier number and the personal identification number of a cashier are supplied as input data to the ECR in a step 41. In a step 42, the input data is compared with information regarding individual cashiers, and, in a step 43, whether the input data is correct or not is decided. If the input data is not correct, the data is discarded in a step 48, and the error is displayed in a step 49 to complete the operation of the ECR. On the other hand, if the input data is correct, the flag storing the validity or invalidity of the registration of the cashier as a register operator is checked in a step 44, and whether the registration of the cashier as the register operator is valid or not is decided in a step 45. If the registration of the cashier as the register operator is invalid, the input data is discarded in the step 48, and the error is displayed in the step 49 to complete the operation of the ECR. If the flag information is valid, processing for registration of the amount of sales is continued in a step 46 until the operation of the ECR is ended in a step 47.

Claims Text - CLTX (10):

2. An electronic cash register system according to claim 1, further comprising means for controlling the validity or invalidity of registration of the cashier as a register operator and preventing the cashier from operating the electronic cash register except during an on-duty time, even if both a cashier number and a personal identification number of the cashier are correct.